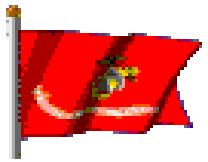
Marine Aviation Transformation

The Future is Now

Modern Day Marine Expo
16 September 2004



Colonel Jim “Grouper” Dixon
HQMC Department of Aviation

Today

- **Winning the War**

MAINTAIN & SUSTAIN

Today
GWOT

- **OIF**
  - **3 HMM**
  - **2.0 HMLA**
  - **1.5 HMH**
  - **0.5 VMGR**
  - **MWSG (-)**
  - **MACG (-)**
  - **1.0 VMU**
  - **1 - 2 VMA**
  - **1 x VMFA**
  - **2 x MEU ACE**
- **OEF**
  - **0.5 HMLA**
  - **0.5 HMH**
  - **MEU ACE**
  - **ATC Det**
- **CJTFHOA**
  - **4 CH-53E**
- **Support to MEUs continue**
- **UDPs will be "gapped"**
  - **HMLA --- Slated for OIF**
  - **HMH --- Slated for OIF**

CMC Guidance (SECDEF approved)
- 7-month deployments
- Do NOT "break the force"

Today
GWOT- TACAIR

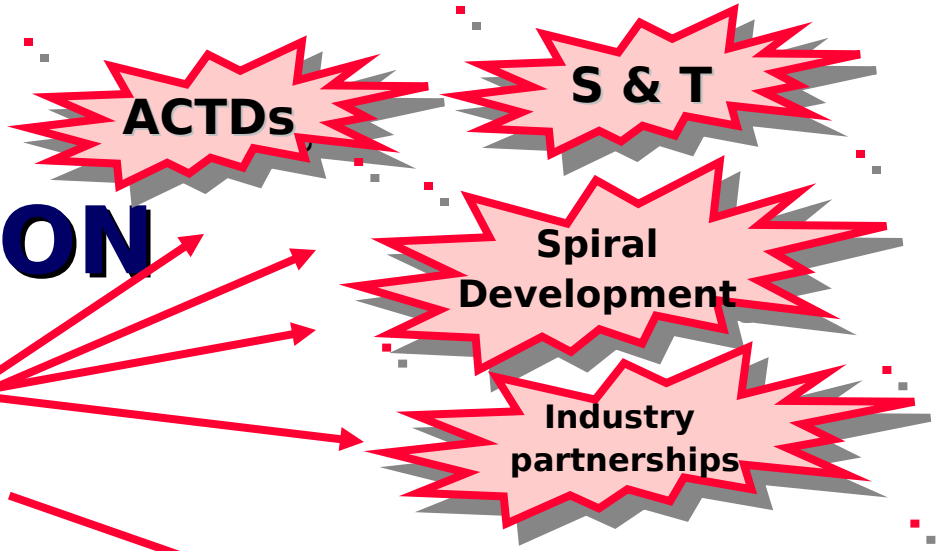
- **AV-8B**
  - **Litening AT**
  - **OSCAR (JDAM capability, etc.)**
- **F/A-18A+/C**
  - **ECP-583**
- **F/A-18C**
  - **Carrier Ops**
- **F/A-18D**
  - **Litening AT**
    - **Wiring installed**
    - **Working on pod acquisition**
  - **ATARS Solid State Recorder**
    - **“CHANGE DETECTION”**

Tomorrow

We must ensure capability for tomorrow

HOW?

- **TRANSFORMATION**
  - **Advanced Concepts**
  - **Maintain Relevance**
  - **Transform**
  - **Transition**



- ✭ Platforms/Systems/C2
- ✭ New Ops Concepts
- ✭ Transition Task Forces
- ✭ ACQUISITION STABILITY

Capability & Safety upgrades

VISION

Transition

TODAY → TOMORROW

BRIDGE

KC-130 F/R/T	KC-130J/T
CH-46E CH-53D	MV-22
UH-1N AH-1W	UH-1Y AH-1Z
PIONEER	VUAV
CH-53E	HLR
F/A-18 A+/B/C/D AV-8B	F-35 JSF
EA-6B	AEA
VH-3/VH-60	VXX
“Old” AVLOG	“NEW” AVLOG MALSP II
“Old” MACCS *(many systems)*	“NEW” MACCS CAC2S / ASPARCS / SLAMRAAM / G/ATOR / HELRASR

STABILIZE

KC-130J

- IOC: 2Q FY05
  - 2D MAW - FY05
  - 3D MAW - FY07
  - WestPac - FY11
- OPEVAL
  - First phase completed April 2004
  - Next report Jan 05
- DT & OT in progress
- FOC: FY13
- Total Force:
  - 130T: 28
    - Night Vision
  - 130J: 51
    - Survivability

MV-22 Osprey

- IOC: FY07
  - 2D MAW - FY07
- Transitions begin…
  - 3D MAW - FY09
  - 1st MAW - FY13 ?
  - 4th MAW - FY15
- Testing
  - OPEVAL Jan-May 05
  - Milestone III: Aug 05
  - VMX-22 flown ~1200 hrs
- FOC: FY17
- Objective: 360

AH-1Z Cobra & UH-1Y Huey

- **OPEVAL** Spring-Summer 2005
- UH-1Y
  - 978 flight hours*
  - IOC: FY08
  - FOC: FY12
  - Resv: FY13
  - Obj: 100
- AH-1Z
  - 1439 flight hours*
  - IOC: FY11
  - FOC: FY17
  - Resv: FY19
  - Obj: 180
- New Build
- Turned Exhaust

*25 August 2004

UH-1 Comparison	UH-1N	UH-1Y	Improve	
Max Gross weight, lb.	10,500	18,500	76%	
Max internal fuel, lb.	1,360	2,584	90%	
HOGE useful load, SL/hot, lb.		3,532	5,93[illegible]0	68%
* Util Cruise speed, 3k ft/hot, ktas	107		15[illegible]	43%
* Msn rad w/4 fully ld troops, nm	63		13[illegible]	113%
*Maneuverability, g's	+0.5 to +2.27		-0.5 to+2[illegible]8	*KPPs

AH-1 Comparison	AH-1W	AH-1Z	Improve	
Max Gross weight, lb.	14,750	18,500	25%	
Max internal fuel, lb.	2,100	2,768	32%	
HOGE useful load, SL/hot, lb.		3,986	5,558	39%
* Cruise speed, 3k ft/hot, ktas	131		142	8%
* Msn radius w/attack payload	58		128	121%
*Maneuverability, g's	+0.5 to +2.4		-0.5 to+2.8	*KPPs

CH-53E / **H**eavy **L**ift **R**eplacement

- AoA: “new build” most cost-effective (vs. SLEP)
- ORD approved by MROC
- CJ&A (Sole Source)
- R&M Metrics
- Cost of Ownership
- Planned IOC: 2015
- Planned FOC: 2021

Requirement (KPPs)

- **27K / 110**
- **Survivability**
- **Logistics footprint**

Requirement (KPPs)

- **Interoperability**
- **Mission Reliability = .89**
- **Sortie Generation Rate = 2.6**

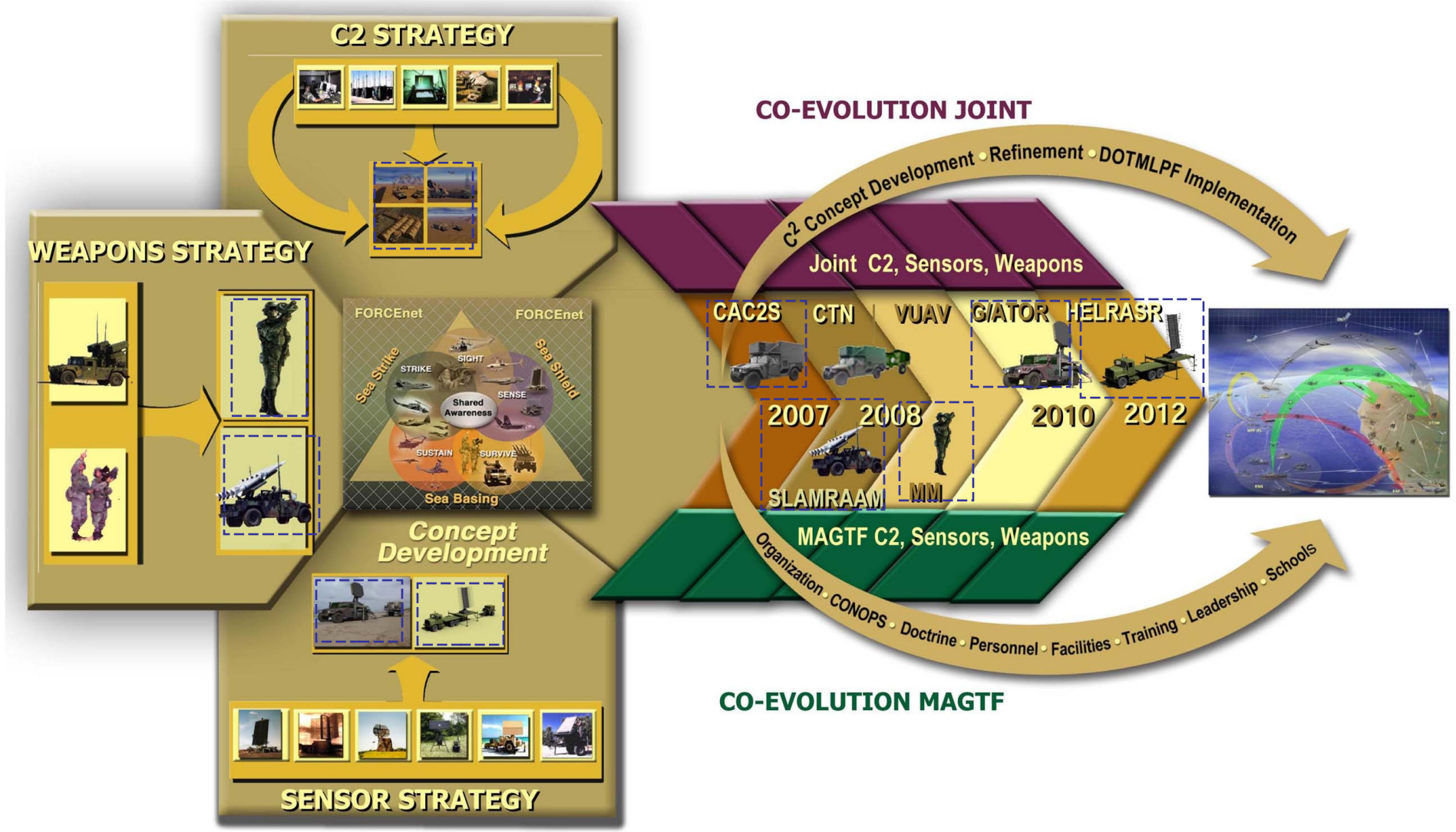
STOVL Joint Strike Fighter

- IOC: FY12
  - 2D MAW - FY12
  - 3D MAW - FY18
  - WestPac – FY20
- FOC: FY25
- Objective: 420
- Firing Order
- Weight
- USAF interest

Unmanned Aerial Vehicles

- Sustain Pioneer until 2010
- Pioneers deployed ISO OIF I/II
- VTUAV requirements currently being staffed – JCIDS / CONOPS
  - 240+ NM, 200+ knots, high ceiling…
  - **200 lb payload**
  - Low Signature: IR, RCS, audible, visual
  - Transportable via V-22 / CH-53E
  - > 90% reliability
  - Links to ForceNet
  - Amphibious ship ops
  - Operated & maintained by 6-8 for 24 hrs
  - 1st VMU transition FY08 (?)
  - Fielding needed in FY09
  - Obj: 44 Aircraft, 22 Ground Control Stations
  - **Common Sensor Package**
- Partner with U.S. Coast Guard
- POM 06 New Start

Marine Air Command and Control System



Marine Aviation Logistics

MALSP *of today*

TODAY

- 30 to 90 days-of-usage dept
- Push system
- Fixed-allowanced resource packages
- Large footprint
- Reactive system
- Outdated and inefficient

LOGISTICS MUST TRANSFORM

Marine Aviation Logistics

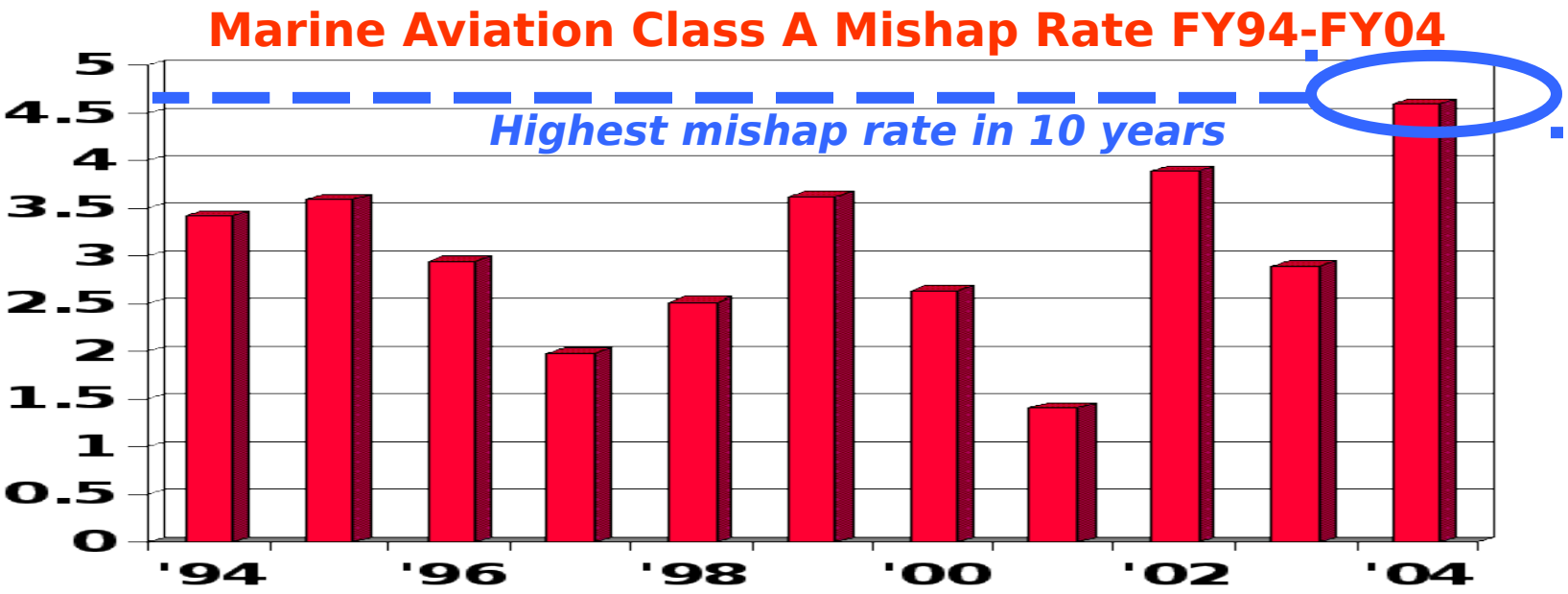
TOMORROW

- Demand Pull system
- Flexible depth
- Dynamic support packages
- Smaller footprint
- Predictive/Proactive

21st CENTURY READINESS

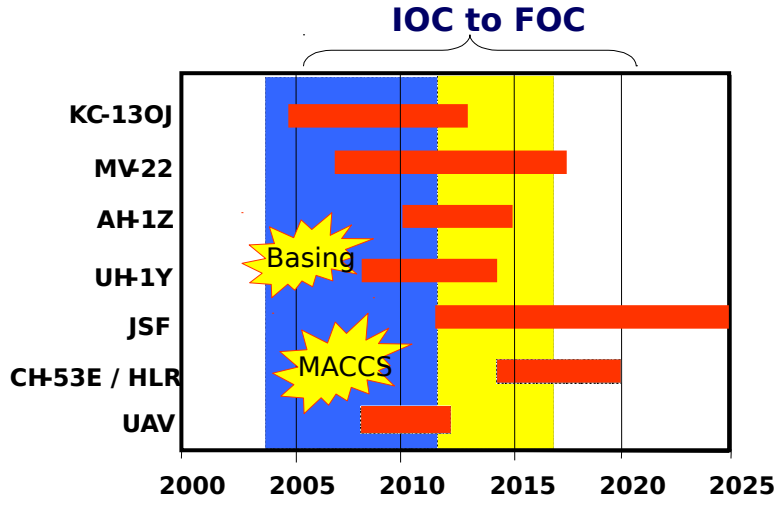
Concern: ***Safety***

- **Aviation: *Training / Peacetime* vs. War / combat ops**
- **Ground mishaps – vehicles, equipment, weapons handling**
- **Off-duty accidents**

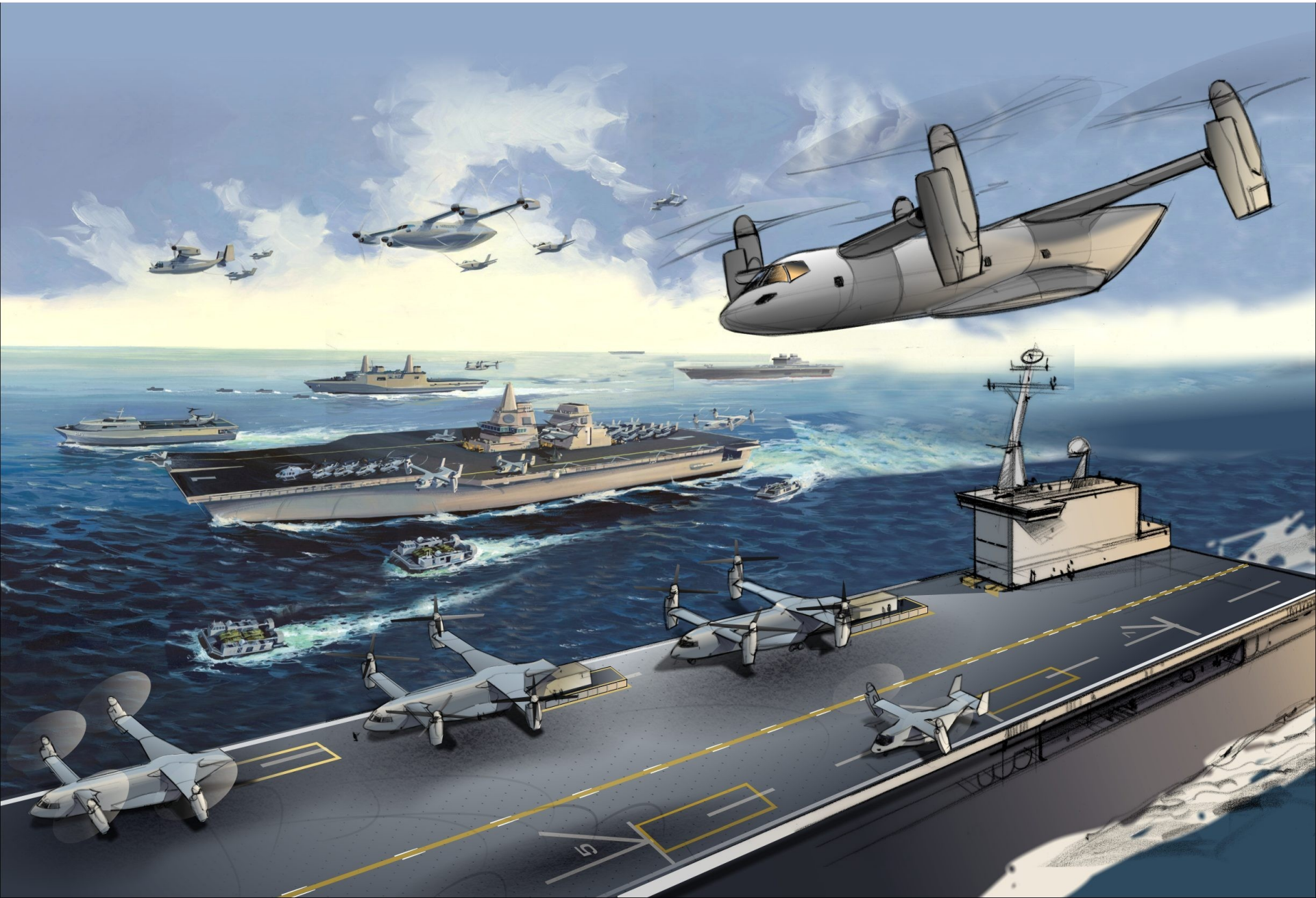


Today is on track

Transition

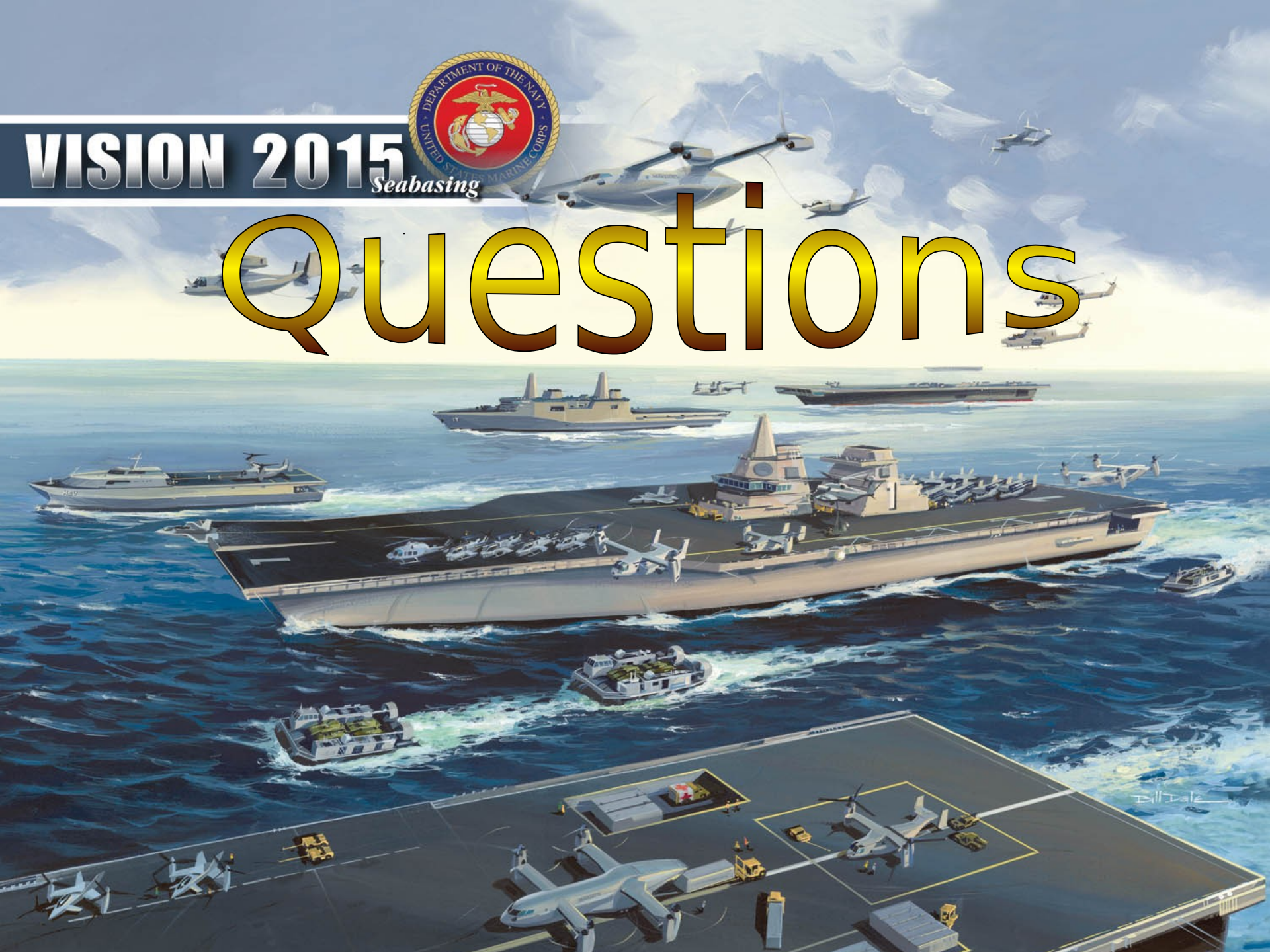


Tomorrow is in work



Key to Success?

Leadership


VISION 2015
Seabasing
Questions